Andrada e Silva, of Brazil, and Dr. Bache, the decease of Dr. Alexander Pearson, formerly of Canton, both members of the Society.

Stated Meeting, December 21.

Present, twenty-eight members.

Dr. PATTERSON, Vice President, in the Chair.

The following donations were received:-

FOR THE LIBRARY.

Malay Bible. Serampore, 1821.-From Mr. L. B. Stone.

- Part of a Malay MS., entitled "History of the Prophets."-From the same.
- A MS. copy, in Malay, of the Credentials, called the "*Tromba Me-nangcarbowe*," carried by the Prince Raja Laboo, last deputed by the States of Sumatra to the Court of the Sultan on the Peninsula.—*From the same*.
- Gospel of St. John, in Malay. Press of the American Missionaries. Singapore, 1837.—From the same.
- The Gospels and Acts, in Malay. Revised Edition. Printed at the Mission Press, for the British and Foreign Bible Society. Singapore, 1831.—From the same.
- Story of Abdullah and Sabat, in Malay. Singapore, 1837.—From the same.
- Romans. Chapters 1 to 16, in Tamul.—From the same.

Gospel of St. John, in Hindustani.-From the same.

Mr. Bruckner's Version of St. John, in Javanese.-From the same.

Acts of the Apostles, in Arabic .- From the same.

Acts of the Apostles, in Hinduwee.-From the same.

Proverbs, in Oordoo.-From the same.

Book of Genesis, in Bengalee. Calcutta, 1833 .- From the same.

Three Missionary Tracts in Chinese.-From the same.

Chinese Almanac.-From the same.

Chinese Testament.-From the same.

The Gospels and Epistles of St. John, in Japanese.—From the same. Gospel of St. John, in Siamese.—From the same.

A Tract in Bugis, a language of Celebes.-From the sume.

- Mémoire sur la Découverte de l'Amérique au Dixième Siècle. Par C. C. Rafn. Traduit par Xavier Marmier. Paris, 1838.—From the Author.
- Journal of the Select Council of Philadelphia. 1837-8. Philadelphia, 1838.—From Mr. J. P. Wetherill.
- Report of the Committee on Prison Discipline, to the Governor General of India in Council, dated the Eighth of January, 1838. Calcutta, 1838.—From Mr. William Adam.
- Second Report on the State of Education in Bengal. District of Rajshahi. Calcutta, 1836.-From the same.
- Third Report on the State of Education in Bengal, &c. By William Adam. Calcutta, 1838.—From the Author.
- The Magazine of Natural History. New Series. Conducted by Edward Charlesworth, F. G. S., &c. No. XXI. For September. London, 1838.—From the Conductor.
- Caspari Frederici Wegener, D. de Aula Atalica Literarum Artiumque Fautrice Libri Sex. Volumen I. Copenhagen, 1836.—From the Author.
- The Elements of Arithmology; being a Treatise on Arithmetic. By Charles Nagy. (In Hungarian.) Bécs, 1835.—From the Author.
- The Elements of Arithmography; being a Treatise on Algebra. By Charles Nagy. (In Hungarian.) Bécs, 1837.—From the Author.
- A Treatise on Arithmetic. (In Hungarian.) Bécs, 1837.—From Mr. Charles Nagy.
- A Treatise on Geometry. (In Hungarian.) Bécs, 1838. From the same.
- Bibliotheca Numismatica. Collecta et Indice Rerum Instructa a Joh. Christ. Hirsch. Nuremberg, 1760.—From Mr. John Vaughan.
- Storia Naturale e Generale Dell'Etna del Canonico Giuseppe Recupero. Two Volumes. Catania, 1815.—From the same.
- The American Medical Library and Intelligencer. By Robley Dunglison, M. D. Vol. II. Nos. 15 to 18. (Presented at this and preceding meetings.) Philadelphia, 1838.—From the Editor.

FOR THE CABINET.

A Specimen of pine-apple hemp, made from the stalk of the pineapple.—From Mr. L. B. Stone.

Annals and Memoirs of the Royal Society of Northern Antiquaries. First Series, 1836-37. Copenhagen, 1837.—From the Society.

A brush from Japan, made of the fibres of the cocoa-nut.—From the same.

The Committee on the solar eclipse of the 18th of September, made a further Report in part, comprising the following observations, received through the attentions of their correspondent, Prof. S. Alexander, of Princeton College, New Jersey:—

No. 32, by Prof. Augustus A. Smith, of the Wesleyan University, Middletown, Con. Latitude 41° 33' 8"; longitude, as deduced by himself from this observation, by the method of Woolhouse, in the Nautical Almanac for 1837, 4h 50m 2s.

			h	m	S	· · · · · · · · · · · · · · · · · · ·
Beginning,	-	-	3	22	0.81	Mean time.
End, -	-	-	5	52	1.46	Mean time.

His telescope was a Herschelian, by Holcomb, seven feet in length, six inches in aperture, with a deep red screen glass, power 150. "There was nothing unusual in the appearance, except, perhaps, about the time of greatest obscuration." At first were seen two or three brushes or pencils of light, streaming out from that border of the moon, which was not projected on the sun's disc, about equidistant from each other, and from the higher cusp of the sun. These soon disappeared, and were succeeded by a faint diffuse light, bordering two-thirds of the lower part of the sun's limb. The duration of this appearance was not noted."

Prof. Smith also noticed an indentation in the sun's limb, which he attributes to the protrusion of a lunar mountain, before any other portion of the moon was visible on the sun's disc. The Committee are of opinion that this appearance should be referred to that class of phenomena which usually precede and follow a central eclipse, and which are to be ascribed to some optical cause rather than to the protrusion of lunar mountains.

No. 33, by Mr. I. N. Z. Blaney, at New Castle, Del., latitude $39^{\circ} 40'$, longitude $5h \ 2m \ 8s$, W.; observation of the duration of the ring with a spy-glass, with smoked glass screen.

From the appearance of the drops to the rupture of the ring, $\begin{array}{c}m&s\\4&47\end{array}$ From the perfect formation of the ring to the perfect rupture, $\begin{array}{c}4&47\end{array}$

Prof. Alexander remarks that the luminous arch round the moon's

dark limb, and the brush of light were only partially visible in his 4 feet Fraunhofer, with a yellow screen glass, having a slight tint of green. He saw them distinctly in the $3\frac{1}{2}$ feet Dollond, with a red screen glass, used by Prof. Henry, for some four minutes after the rupture of the ring, though none was visible in the Fraunhofer telescope; at least none is recollected to have been seen, though he examined the sun in the direction in which the ring broke. The testimony of so experienced an observer, who, in examining this arch and brush of light, used, interchangeably, the yellow and red screen glasses, in favour of their far greater visibility through the red screen glass, appears to be conclusive on the subject. This remarkable circumstance, not hitherto noticed in European observations, and first suggested by Robert Treat Paine, Esq., from his observations at Washington, appears to be now confirmed. It is one of great importance; as it seems to furnish evidence of the existence of a lunar atmosphere, through which, as through our own, the red rays have the greatest penetrative power. It also leads to new views concerning the cause of the remarkable appearances of the beads of light, and the dark lines frequently noticed; since it shows that their appearance may be completely modified by a change in the colour, and, consequently, in the absorbing power of the screen glass through which they are observed.

The fact, noticed by most of the observers, that before the formation and after the breaking of the ring, the edge of the moon off the sun was distinctly visible, and illuminated for some distance within the moon's surface, is just such as would be presented by a *twilight* caused by a lunar atmosphere; nor does there seem to be any other plausible explanation of this phenomenon.

The Committee on Prof. Henry's paper, entitled "Contributions to Electricity and Magnetism, No. 3. On Electro-dynamic Induction," reported in favour of publication, and the Report was adopted.

The Committee on Dr. Hare's papers, entitled, 1. "Rotary Multiplier or Galvano-motive needle;" 2. "Apparatus for showing on a large scale the Decomposition and Recomposition of Water by Galvanism;" 3. "Improved Process for Potassium," reported in favour of publication, and the Report was adopted. Mr. Lea submitted the following description of a new shell, recently taken in the vicinity of Cincinnati by Mr. T. G. Lea.

MELANIA CINCINNATIENSIS.

"Testà valde depressà, inferné compressà, fuscà, trifasciatà, bicarinatà, apice acuminatà; anfractibus quaternis; aperturà subrotundà."

This is a very minute species, and very remarkable for its roofshaped spire, and two carinæ which are coloured.

On motion of Dr. Patterson, the Committee appointed on the late eclipse, were instructed to make and collect observations in relation to the occultation of stars in the constellation of the Pleiades, which will occur on the 27th instant.